CLAIMS

1. A method for managing a collaborative work environment wherein plural users share data resources, comprising:

accessing a first data resource assigned to a first hierarchical level, the first data resource having at least one subdivision;

creating at least one sub-resource corresponding to said at least one subdivision of the first data resource, and associating each sub-resource with at least one additional hierarchical level; and

creating a data structure indicating that each data resource on a hierarchical level is associated with a transaction that is associated with a subdivision of a related data resource on a prior hierarchical level, and that each subdivision is locked until the associated transaction is committed.

2. The method of claim 1, wherein the accessing step comprises:
creating the first data resource having at least one subdivision.

3. The method of claim 1, further comprising:
associating each data resource or sub-resource with a corresponding user of said plural users in said collaborative work environment.

4. The method of claim 1, further comprising:
associating at least one access parameter with each data resource or sub-resource.

5. The method of claim 4, wherein said at least one access parameter represents at least one of work status, approval status, ownership, whether the data resource or the sub-resource is locked, and by which transaction the data resource or sub-resource is locked.

6. The method of claim 1, further comprising:
storing the data resources and said data structure in a remote database server that includes a database or nested databases.

7. The method of claim 1, further comprising:

storing the data resources and said data structure in a distributed manner in a data network.

8. The method of claim 3, further comprising:

assigning a selected sub-resource corresponding to a further sub-division of an existing sub-resource;

associating said sub-division with a selected user in said collaborative work environment; and

placing a lock on said sub-division of said existing sub-resource until the assigned sub-resource is committed, approved, and included in the original sub-resource.

9. The method of claim 1, wherein each data resource or sub-resource is an electronic document, a computer file, a set of computer files, or a computer resource that can be accessed, copied, and modified from a client computer.

10. A method for accessing, from a client computer, a shared data resource in an environment for collaborative work, comprising:

retrieving a data structure stored on a computer network, said data structure representing said data resource and sub-resources associated with at least one sub-division of said data resource,

said sub-resources being associated with at least one hierarchical level, each data resource on a hierarchical level being associated with a transaction that is associated with a subdivision of a data resource on a prior hierarchical level, and each subdivision being locked until all associated transactions are committed.

11. The method according to claim 10, further comprising:

modifying an accessed sub-resource and returning the modified sub-resource to the computer network with an updated access parameter indicating that the modified sub-resource is pending reintroduction into the corresponding data resource.

12. The method according to claim 10, further comprising:

representing, on a display of said client computer, a graphical representation of said

data resource and sub-resources arranged according to said at least one hierarchical level.

13. The method according to claim 11, wherein said data structure includes access parameters indicating at least one of work status, approval status, ownership, whether the data resource is locked, and by which transaction the data resource is locked.

14. The method of claim 13, further comprising:
associating said data resource and sub-resources with at least one access parameter.

15. The method according to claim 10, wherein said data structure is modified, as a result of a request, to only include representations of resources and sub-resources that fulfill a set of conditions regarding access parameters associated with each resource and sub-resource.

16. The method according to claim 10, wherein said data resource and said data structure are stored in a remote database server having a database or nested databases.

17. The method according to claim 10, wherein said data resource and said data structure are stored in a distributed manner in a data network.

18. The method according to claim 10, wherein each data resource or sub-resource is an electronic document, a computer file, a set of computer files, or a computer resource that can be accessed, copied, and modified from a client computer.

19. A computer program product storing program instructions on a computer readable media for execution on a client computer system, which, when installed on the client computer system, cause the client computer system to perform the method recited in any one of claims 1-18.

20. A system for managing a collaborative work environment in which plural users share at least one data resource, comprising:
plural client computers, each client computer having a collaborative user interface configured to allow a respective user to access or create a first data resource assigned to a

first hierarchical level, the first data resource having at least one subdivision; and

at least one server computer communicatively coupled to the plural client computers over a network, the at least one server computer having a database management system configured to create at least one sub-resource corresponding to the at least one subdivision of the first data resource, and associating each sub-resource with at least one additional hierarchical level,

wherein the database management system is configured to create a data structure indicating that each data resource on a hierarchical level is a transaction associated with a subdivision of a related data resource on a prior hierarchical level, and that each subdivision is locked until the associated transaction is committed.

21. The system of claim 20, wherein the database management system is configured to associate each data resource or sub-resource with a corresponding user of said plural users in said collaborative work environment.

22. The method of claim 20, wherein the database management system is configured to associate at least one access parameter with each data resource or sub-resource.

23. A collaborative user interface configured to coordinate collaborative work over a network by plural users, comprising:

a first interface unit configured to allow a user to establish a sphere of control in which at least one authorized sub-user has access to at least one respective sub-resource selected from plural data resources stored in a database;

a second interface unit configured to allow the user to accept or discard work performed on the at least one sub-resource by each of the at least one authorized sub-user; and

a third interface unit configured to display a hierarchical representation of the sphere of control, including a status of the sub-resources associated with each sub-user.

24. The collaborative user interface of claim 23, wherein the first interface unit is configured to allow the user to determine the at least one authorized sub-user and to invite the at least one authorized sub-user to participate in the sphere of control.

25. The collaborative user interface of claim 23, wherein the first interface unit is configured to allow the user to determine the sub-resources accessible to each sub-user in the sphere of control.

26. The collaborative user interface of claim 23, wherein the first interface unit is configured to prevent the user from allocating greater access rights over the at least one sub-resource, to the at least one authorized sub-user, than the access rights held by the user.

27. The collaborative user interface of claim 23, wherein the first interface unit is configured to allow each of the at least one authorized sub-user to set an access parameter for an associated sub-resource in the sphere of control, the access parameter indicating a status of the associated sub-resource.

28. The collaborative user interface of claim 25, wherein the first interface unit is configured to designate a sub-resource accessible to a sub-user as read-only to the user until the work performed by the sub-user on the sub-resource is accepted or discarded by the user.

29. The collaborative user interface of claim 28, wherein the first interface unit is configured to restore to the user original access rights to the sub-resource after the work performed by the sub-user on the sub-resource is accepted or discarded by the user.

30. The collaborative user interface of claim 23, wherein the first interface unit is configured to allow the user to split an existing sub-resource into one or more sub-resources so that other of the plural users can be authorized to access the one or more sub-resources.